

# C-111 Spreader Canal Project Update

Governing Board Meeting  
September 10, 2009

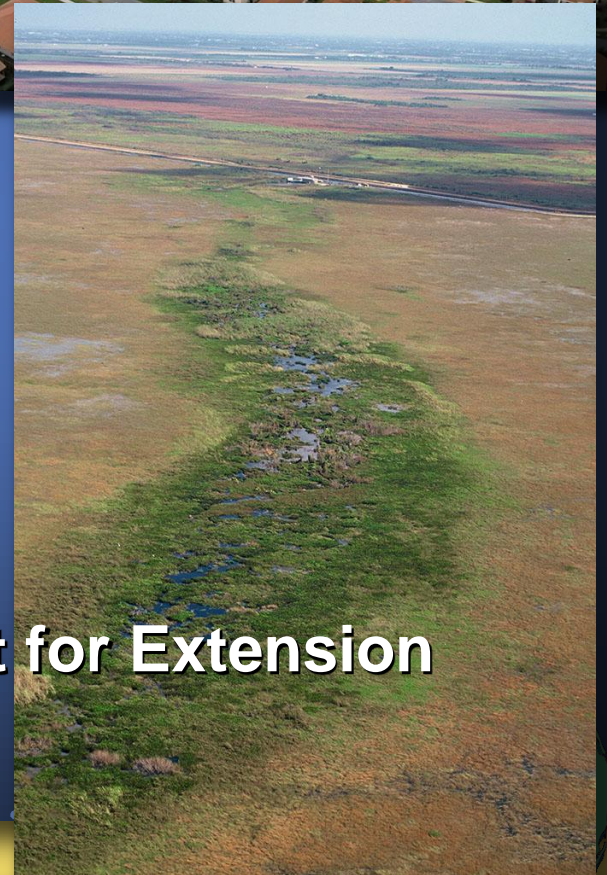
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Assistant Deputy Executive Director  
Everglades Restoration and Capital Projects

[sfwmd.gov](http://sfwmd.gov)



# Presentation Summary

- Project Overview
- Construction Bid Update
- Fish Farm Lease
- PIR Schedule
- FDEP & USACE Permits
  - Agricultural Concerns / Request for Extension
  - USF&WS Biological Opinion

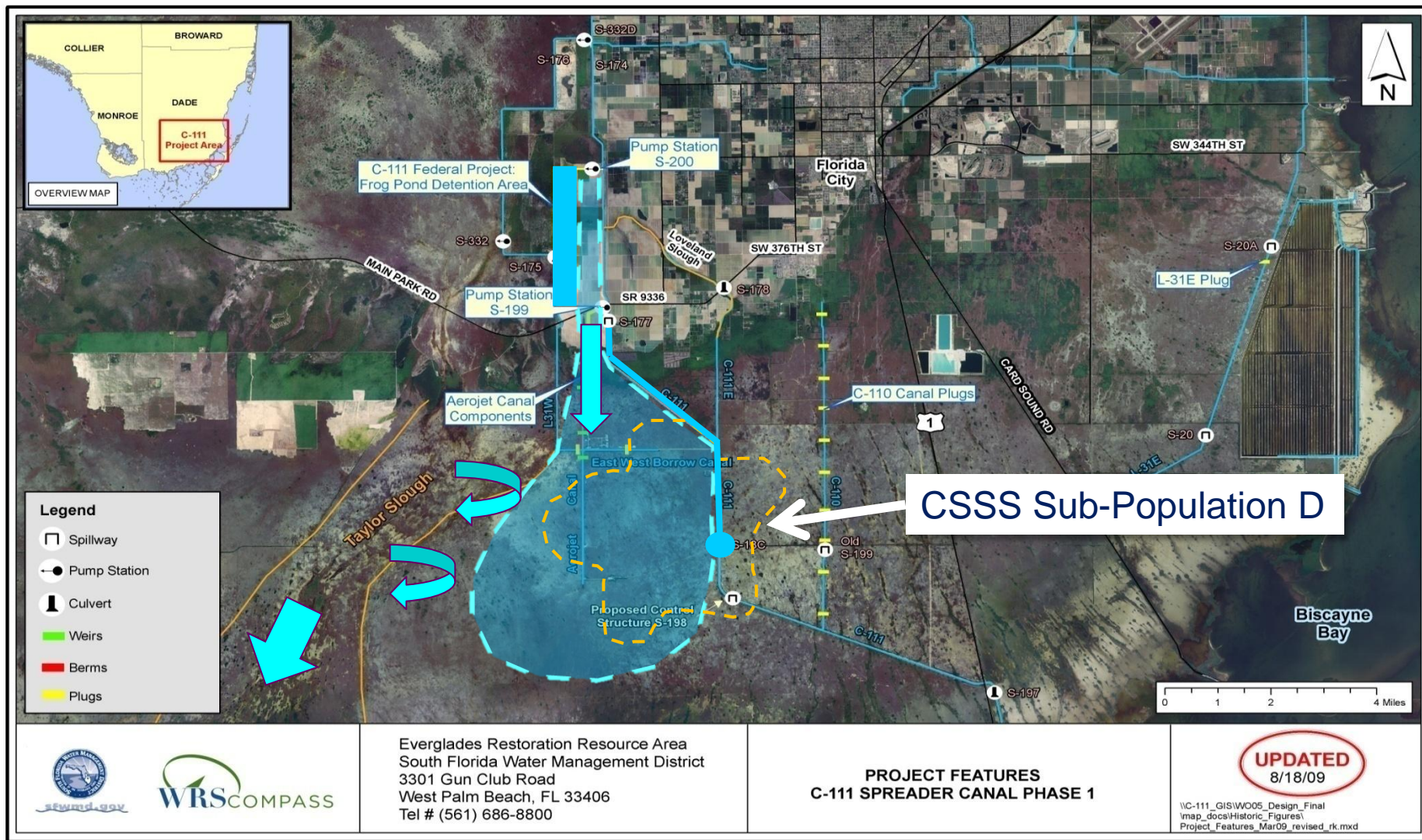


## **Project Objectives**

- **Restore the quantity, timing and distribution of water delivered to Florida Bay via Taylor Slough**
- **Improve hydroperiods and hydro-patterns in the Southern Glades and Model Lands**
- **Return coastal salinities in western Florida Bay to levels as close as possible as to the pre-drainage model runs by restoring upstream water levels in eastern Everglades National Park**



# C-111 Spreader Canal, Phase 1



Proposed Construction  
by SFWMD

C-111 Federal Project:  
Frog Pond Detention Area

Pump Station  
S-200

Florida  
City

SW 376TH ST

Loveland  
Slough

SR 9336

S-178

S-177

Pump Station  
S-199

Cell 3  
Cell 2  
Cell 1

Aerojet Canal  
Components

L31W

East West Borrow Canal

C-111

C-110 Canal Plugs

1

CARD SOU

Taylor Slough

Aerojet  
Canal

S-18C

Proposed Control  
Structure S-198

Construct in later phases  
by USACE

C-111

S-19

# Construction Bid Reviews

- Bids were reviewed by Procurement , Engineering and Construction Departments.
- Significant spread between Bid Prices and Engineer's estimate
- Bid review meeting was held between District staff and the Apparent Low Bidders
  - Ensure Contractors were clear on the scope of work
  - Verify quantities and unit prices provided in their bids.
- District Staff conducted a thorough review of quantities and unit prices for each bid and found them to be within an acceptable range for this type of work.



## Construction Bid Summary Frog Pond Detention Area

RFB Advertised:	July 14, 2009
Bid Opening:	August 12, 2009
Number of Bids Received:	12
Bid Range:	\$10,800,000 - \$19,140,000
Low Bid Deemed Non-responsive:	0
Engineer's Estimate:	\$22,100,000 - \$24,500,000
Deemed Responsive Low Bidder:	Palm Beach Grading, Inc. at \$10,800,000



# **Construction Bid Summary**

## **Pump Stations S-199 and S-200**

RFB Advertised:	July 14, 2009
Bid Opening:	August 12, 2009
Number of Bids Received:	5
Bid Range:	\$7,149,000 - \$14,437,754
Low Bid Deemed Non-responsive:	0
Engineer's Estimate:	\$16,950,000 - \$18,800,000
Deemed Responsive Low Bidder:	Wright Construction Group at \$7,149,,000



# **Construction Bid Summary**

## **Aerojet, C-110 and L-31E Canal Modifications**

RFB Advertised:	July 21, 2009
Bid Opening:	August 19, 2009
Number of Bids Received:	10
Bid Range:	\$6,980,000 - \$10,643,592
Low Bid Deemed Non-responsive:	0
Engineer's Estimate:	\$14,000,000 - \$15,575,000
Deemed Responsive Low Bidder:	GlobeTec, Inc. at \$6,980,000

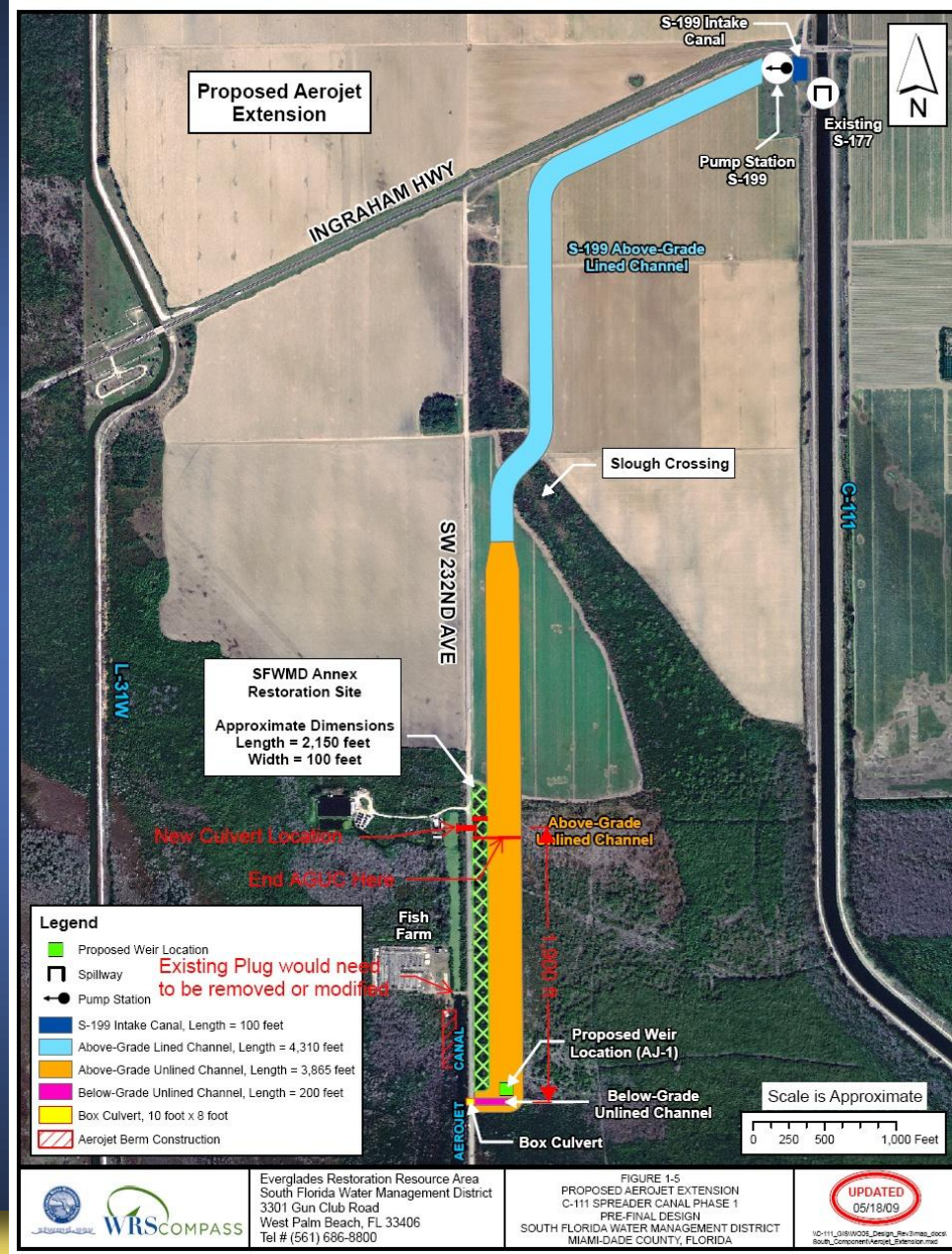


# Discussion



# Fish Farm

- Lease: April, 1996 – March 2016
- Use and configuration conflicts with proposed design
- Water quality concerns expressed by agencies
- Potential restrictions to operations based on land elevations and proposed water levels
- Staff recommends lease termination



# Discussion



## **PIR Schedule for Record of Decision**

- June 2009 – ROD scheduled for March 11, 2010
- ROD currently scheduled for September, 2010
- 3<sup>rd</sup> Party Challenged Validity of USACE 404 Permit for the EAA A1 Reservoir
  - Alleged that the permit was not based on a completed PIR.
  - Court determined issue moot based on termination of construction contract
- Schedule slippage increases the exposure to similar potential challenges



# Discussion



## 404 Construction Permit Issues

- Regulatory permit (404) was on schedule to be issued by USACE in early September, 2009
  - 404 permit is separate regulatory action from PIR
- Requires other authorizations prior to issuance;
  - State Water Quality Certification – ‘1502 Permit’ (FDEP)
  - Biological Opinion – Endangered Species (USF&WS)
- Potential issues include:
  - Raising Water Levels in Ag Areas with S-198 structure or adaptive management operations for S-18C
  - Impacts to Sparrow Habitat Areas



# Several Stakeholder Workshops Held to Resolve Issues

- Stakeholders Workshop # 1 – 2/5/08
- Dade County Farm Bureau – 2/26/08
- Stakeholders Workshop # 2 – 3/19/08
- Stakeholders Workshop # 3 – 5/7/08
- WRAC Issues Workshop – 6/17/08
- WRAC Meeting – 7/3/08
- WRAC Issues Workshop – Operational Plan 9/25/08
- WRAC Issues Workshop – 10/21/08
- Other recent public meetings associated with the Federal process for the PIR



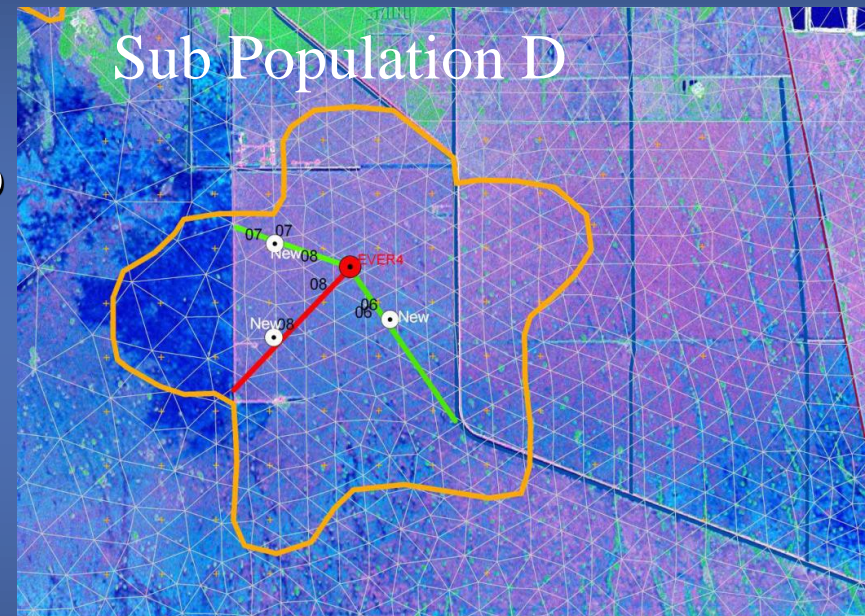
## **Request for Time Extension to Issuance of Water Quality Certification**

- At the request of a local agricultural landowner, FDEP is granting a 30-day time extension for the issuance of the State 1502 Permit.
- Claims potential damage associated with the Operational Adjustment component of the permit.
- Staff is scheduling meetings with the owner's representatives and FDEP this week to pursue resolution.



# Biological Opinion for Cape Sable Seaside Sparrow - Terms and Conditions for Effects on Critical Habitat

- Annual depth and duration monitoring in sub pop C&D
- Topographic surveys for sub pop C&D
- Habitat Improvement Plan for 1600 acres in or around sub pop D
- Vegetation transect monitoring
- Sparrow nesting surveys in sub pop D
- Annual Reports for 10 years
- Potential for challenges, but have not heard from stakeholders



# Restoring America's Everglades

## *Recovering South Florida's Wildlife*

Briefing for the South Florida Water Management District Governing Board

West Palm Beach, Florida

September 10, 2009



# U.S. Fish and Wildlife Service

## *Restoring America's Everglades – Recovering Multiple Species*

### **Outline of Presentation**

- I. The Legacy of the Mid 20<sup>th</sup> Century
- II. Guided by the Science – The Link between Restoration and Recovery
- III. The Critical Importance of the C-111 Spreader Canal Project
- IV. Successfully Navigating the Transition in Partnership
- V. Take Home Messages and Next Steps



# U.S. Fish and Wildlife Service

## *Restoring America's Everglades – Recovering Multiple Species*

### **Imperiled Bird Recovery**

#### The Legacy of the Mid 20<sup>th</sup> Century

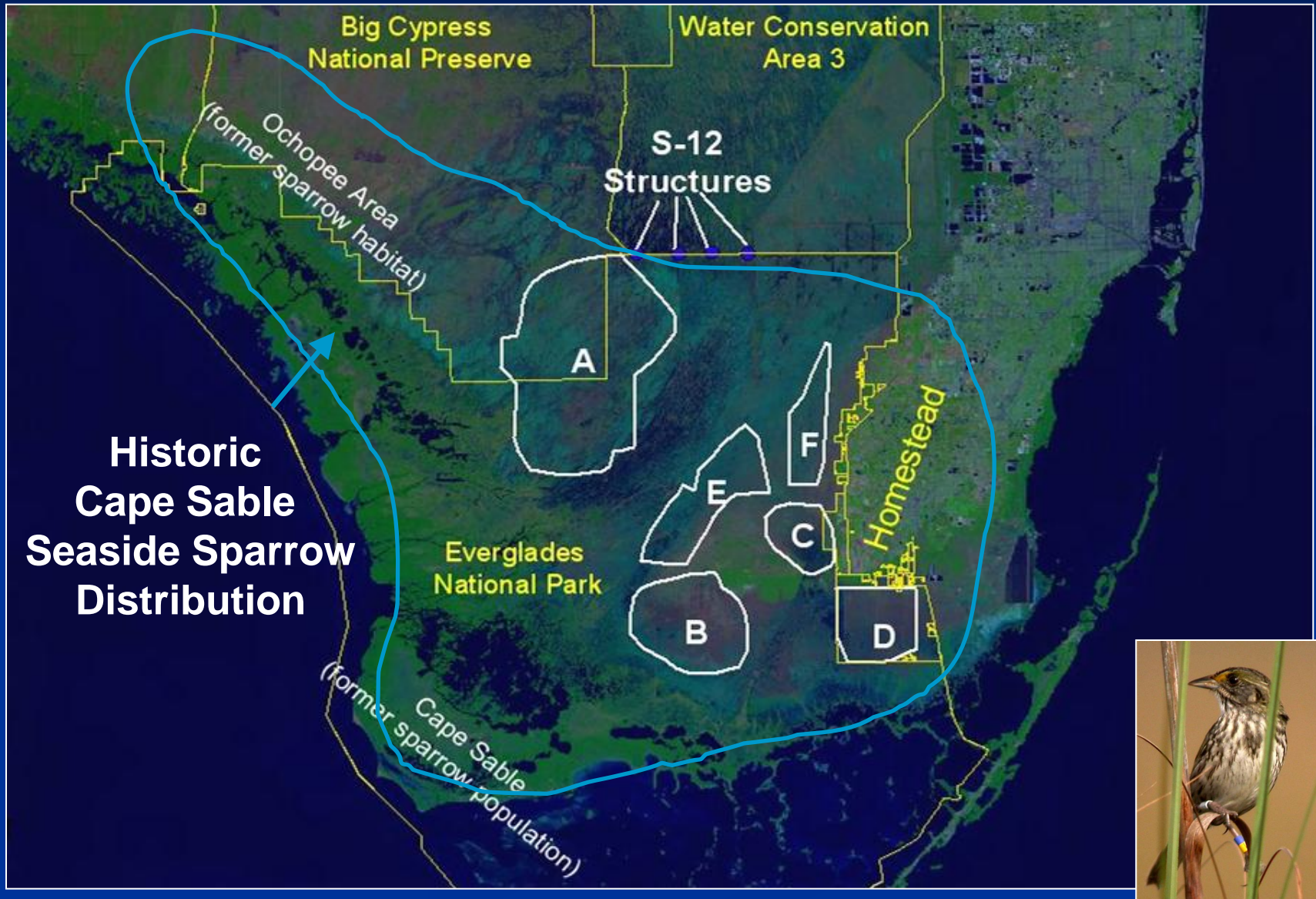
- Wading Birds
- Cape Sable Seaside Sparrow
- Snail Kite
- Wood Stork
- Roseate Spoonbill





# U.S. Fish and Wildlife Service

## *Restoring America's Everglades – Recovering Multiple Species*





# U.S. Fish and Wildlife Service

## *Restoring America's Everglades – Recovering Multiple Species*

### **Guided by the Science**

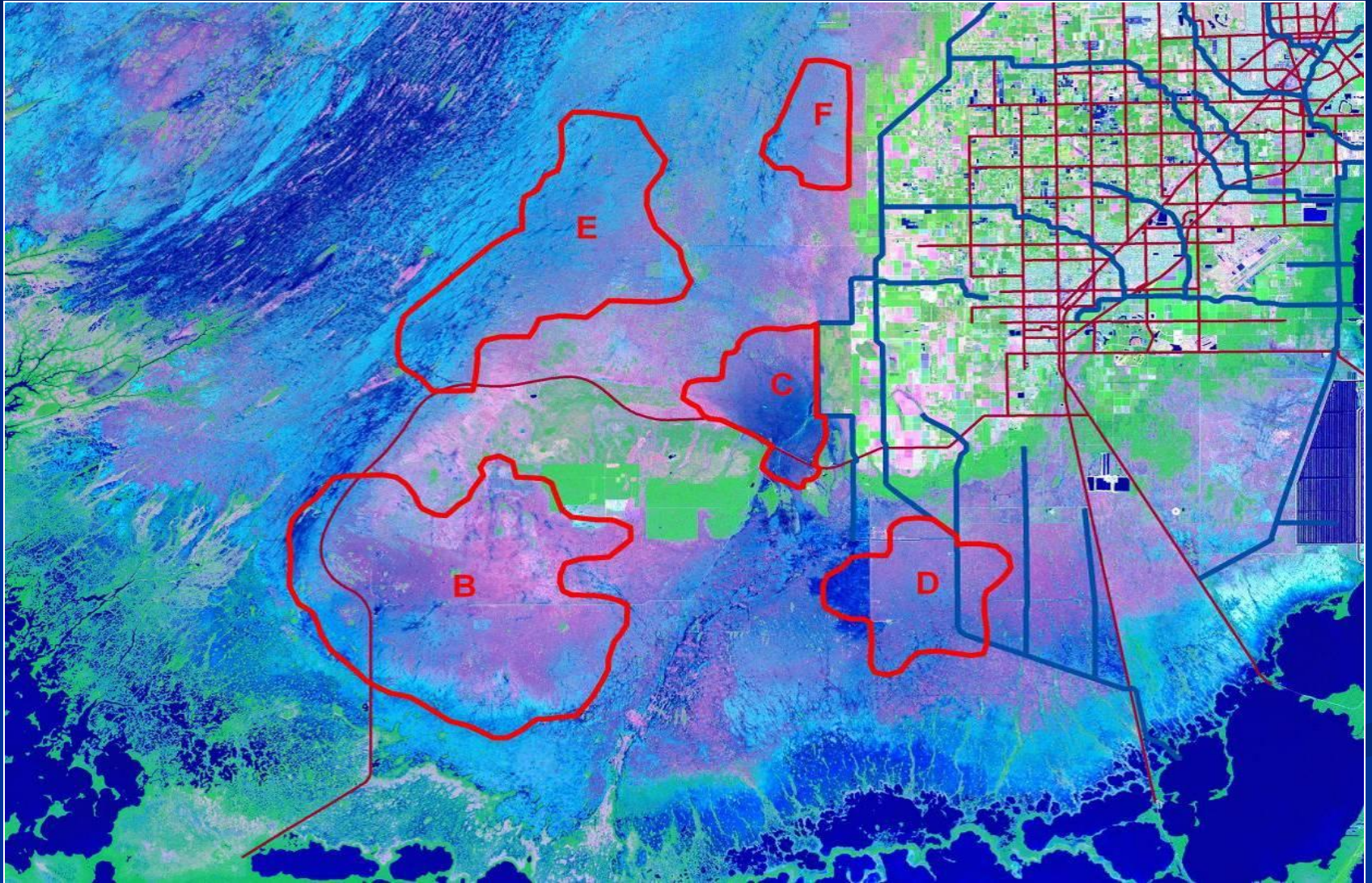
- Science Review Findings: Restoration Is Needed to Recover Imperiled Birds
- The Transition to Restoration Is Key
- Monitoring and Adaptive Management Are Our Guide





# U.S. Fish and Wildlife Service

## *Restoring America's Everglades – Recovering Multiple Species*





# U.S. Fish and Wildlife Service

## *Restoring America's Everglades – Recovering Multiple Species*

### **C-111 Spreader Canal Project Review**

- Ecosystem and Multi-Species Benefits – A Key First Step
- Effects on Subpopulation C
- Managing the Transition in Partnership
  1. Monitoring and Adaptive Management
  2. Seizing New Opportunities
  3. Advancing Restoration Projects Now



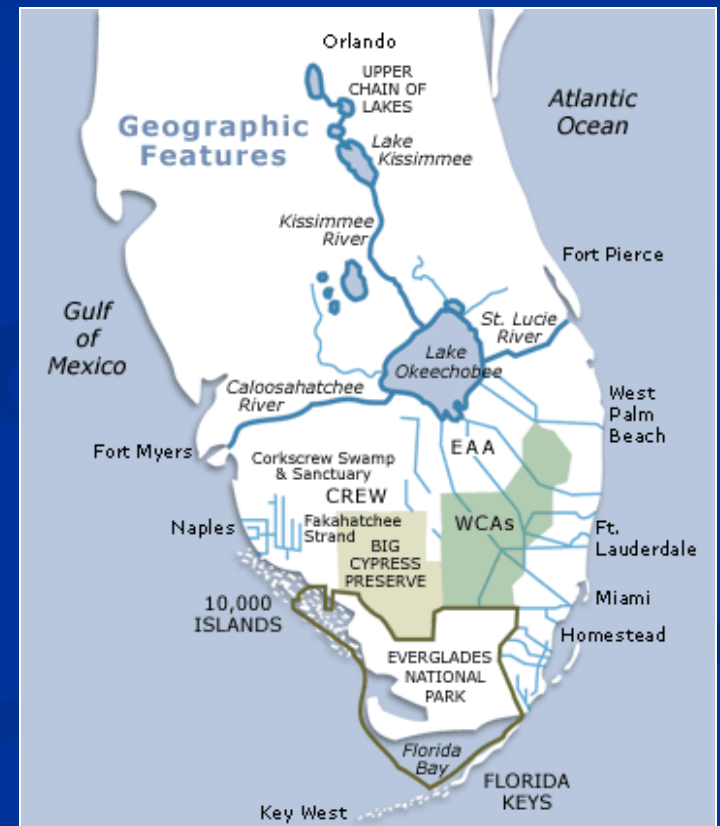


# U.S. Fish and Wildlife Service

## *Restoring America's Everglades – Recovering Multiple Species*

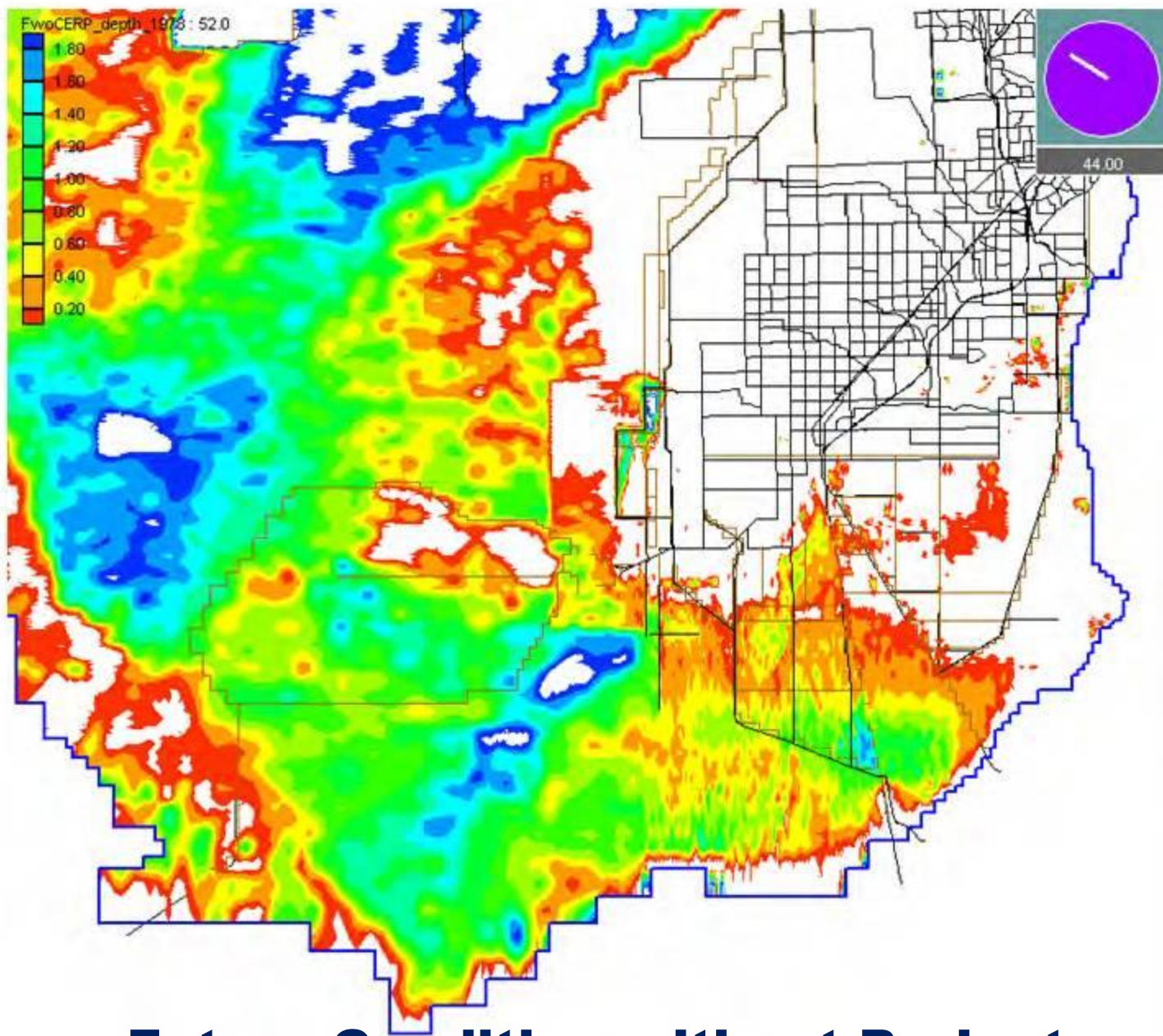
# The Future of Everglades Restoration and Multi-Species Conservation

- We Need Restoration ASAP:  
*National Academy of Sciences*
- Incremental Improvements to WCA3 – Focus on Science
- Modified Water Deliveries
- C-111 Phase 2
- Seepage Management
- Decompartmentalization

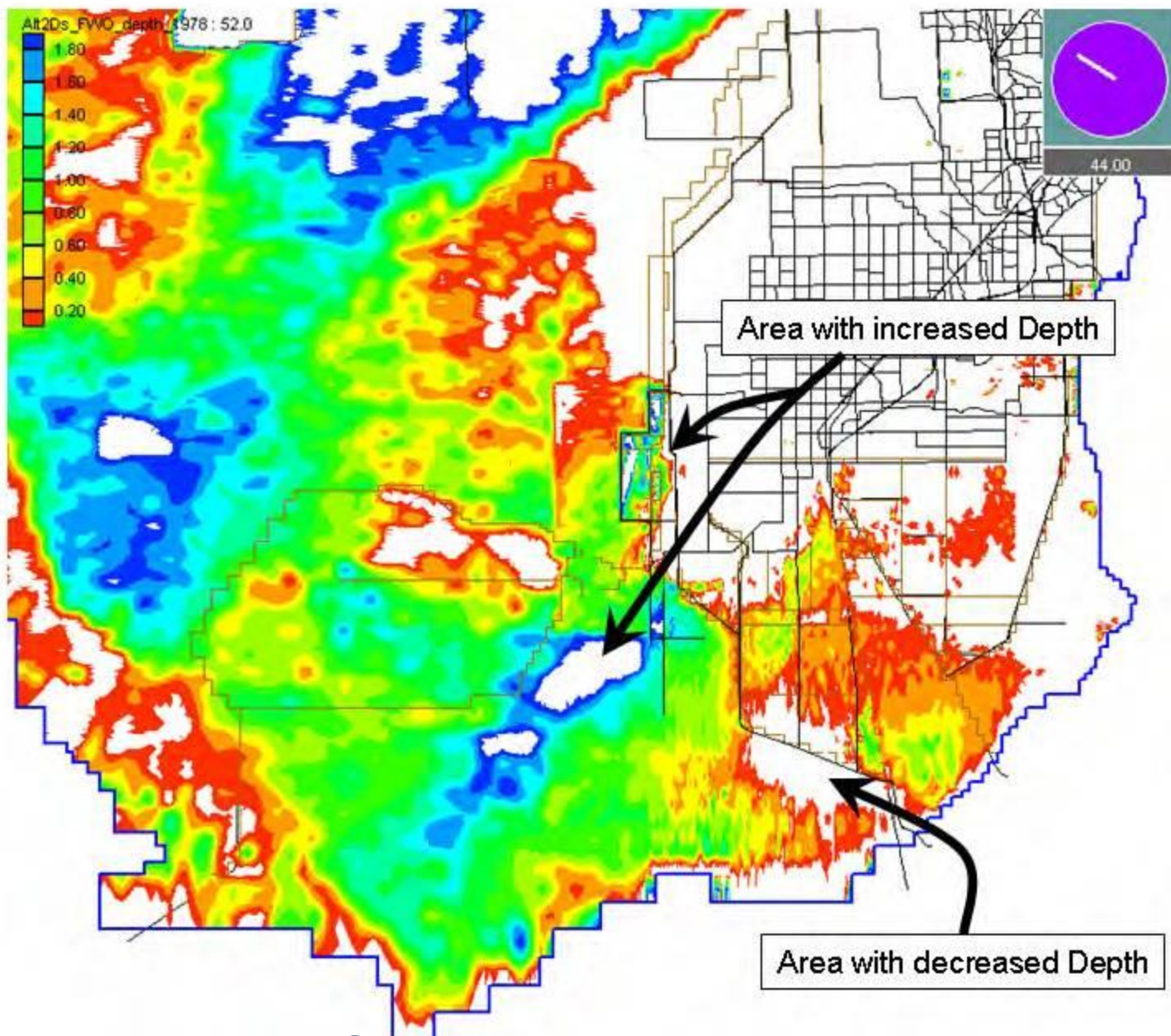


# Discussion

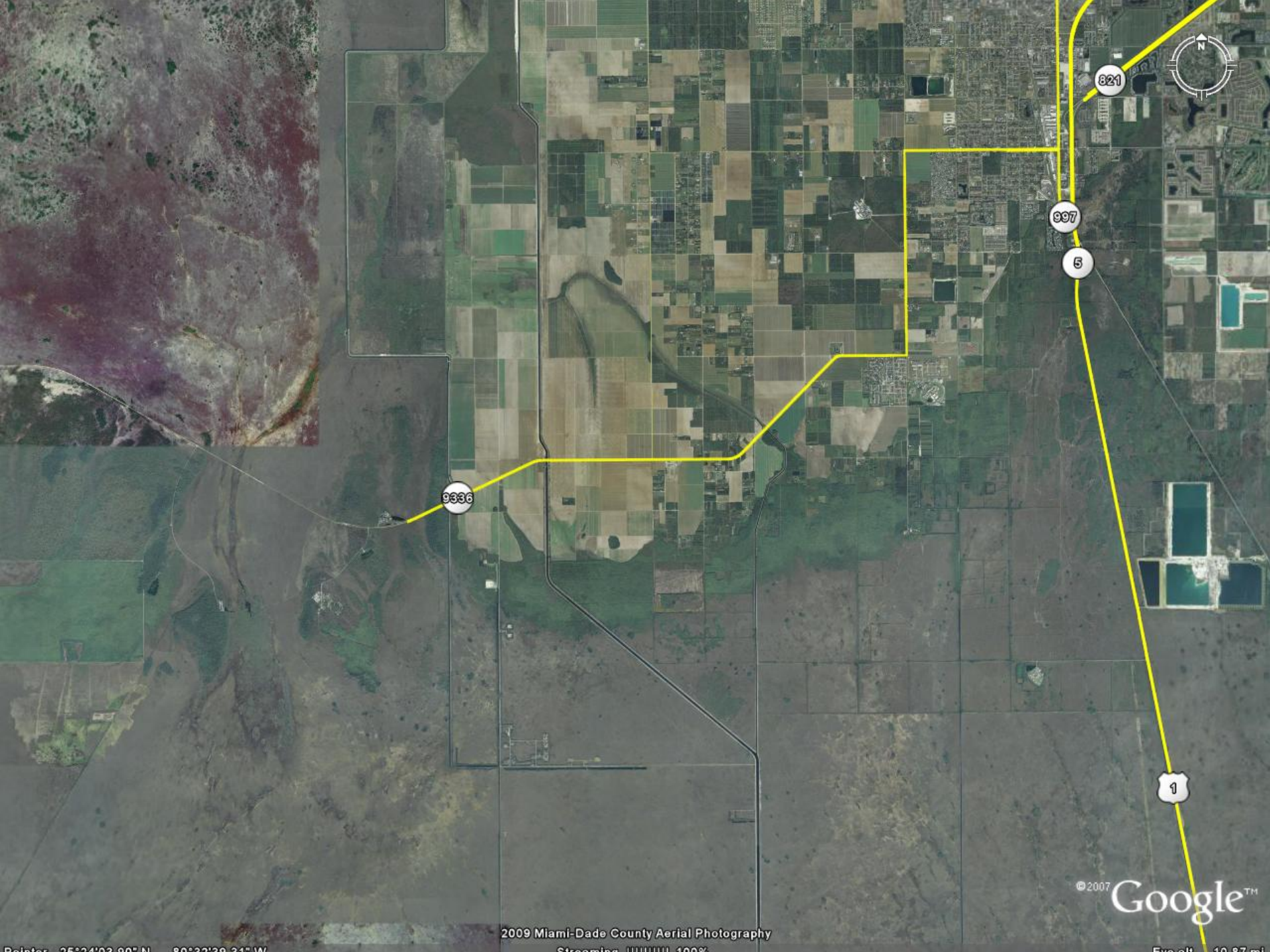




**Future Condition without Project**



**Future Condition with Project**



821

997

5

9336

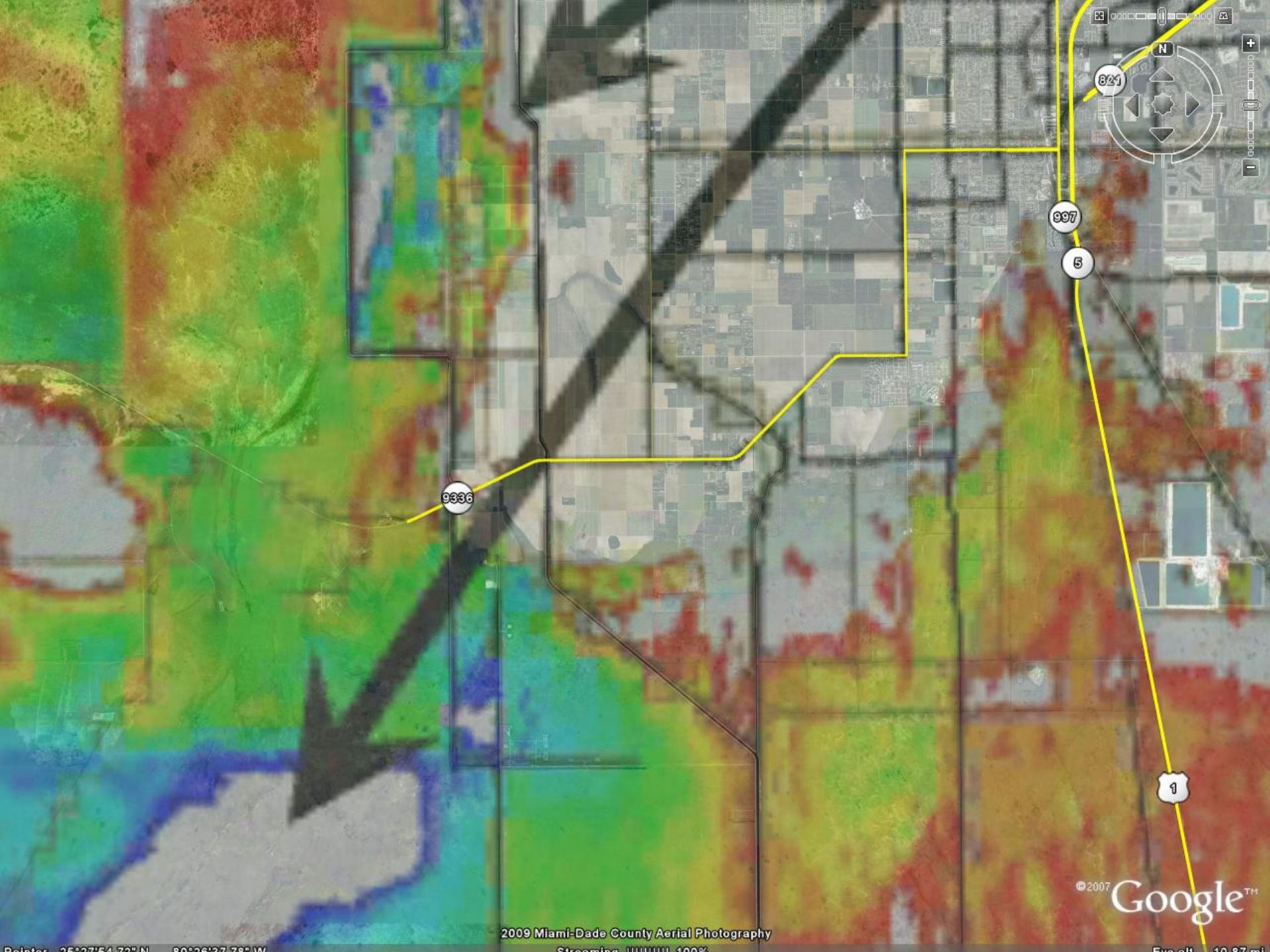
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2009 Miami-Dade County Aerial Photography  
Streaming 100%

Point: 25°24'02.90" N 80°22'39.31" W

Elev: 10.87 m





**Alternative Design  
(Less Cost)**



**Current Design**

